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Building & Highway Material Testing Laboratory
An ISO 9001:2008 Certified Company
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

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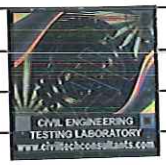
Job No.: CTCE/BBMP/KRIDL/WNo.13/SDBC/Stripping/2016-17 12.04.2016

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager (West),** KRIDL, Bangalore.
Name of the work	Improvements and Asphalting to 1st and 2nd Main road of BHEL Mini colony and other roads in Mallasandra, in Shettyhalli Sub Division, Ward No.13, BBMP, Bangalore.
Reference	No. EE/DD/WO/ /2015-16
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	12.04.2016



Type of binder : 80/100
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.1	3.20	96.80
2	3.2		
3	3.3		

Comments:
→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

Note:
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Job No.: CTCE/BBMP/KRIDL/WNo.13/Sp_Wa/2016-17 12.04.2016

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager (West),** KRIDL, Bangalore.
Name of the Work	Improvements and Asphalting to 1st and 2nd Main road of BHEL Mini colony and other roads in Mallasandra, in Shettyhalli Sub Division, Ward No.13, BBMP, Bangalore
Reference	No. EE/DD/WO/ /2015-16
Type of Mix	Semi Dense Bituminous Concrete
Source / Location	Hotmix Plant, Bangalore
Date of Testing	12.04.2016

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2013	2015	2015	
2	Weight of basket suspended in water	W_2 g	755	755	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1258	1260	1260	
4	Weight of saturated surface dry aggregate in air	W_3 g	2007	2011	2014	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	749	751	754	
6	Weight of oven dried aggregate	W_4 g	1995	1998	1999	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.664	2.660	2.651	2.658
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.707	2.707	2.705	2.706
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.60%	0.65%	0.75%	0.67%

Comments:

→ Maximum allowable Aggregate Water absorption value for Semi Dense Bituminous Concrete is 2.0%

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12.04.2016

BITUMEN CONTENT DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AS per IRC : SP : 11 - 1984

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	Improvements and Asphalting to 1st and 2nd Main road of BHEL Mini colony and other roads in Mallasandra, in Shettyhalli Sub Division, Ward No.13, BBMP, Bangalore
REFERENCE	No. EE/DD/WO/ /2015-16
SAMPLE I/D	Roads in1st and 2nd Main road of BHEL Mini colony, Ward No.13.
DATE OF TESTING	12.04.2016

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	474	475
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	26.00	25.00
7. Bitumen content in %	5.20	5.00
8. Average	**5.10**	

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BITUMEN GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS : 2386 and IRC : SP : 11 - 1984

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager (West),** KRIDL, Bangalore.
NAME OF THE WORK	Improvements and Asphalting to 1st and 2nd Main road of BHEL Mini colony and other roads in Mallasandra, in Shettyhalli Sub Division, Ward No.13, BBMP, Bangalore
REFERENCE	No. EE/DD/WO/ /2015-16
SAMPLE I/D	Roads in1st and 2nd Main road of BHEL Mini colony, Ward No.13.
DATE OF TESTING	12.04.2016

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	26.35	5.56	5.56	94.44	90-100
4.75	257.48	54.32	59.88	40.12	35-51
2.36	62.38	13.16	73.04	26.96	24-39
1.18	46.12	9.73	82.77	17.23	15-30
0.3	27.95	5.90	88.67	11.33	9-19
0.075	31.02	6.54	95.21	4.79	3-8

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	28.15	5.93	5.93	94.07	90-100
4.75	265.49	55.89	61.82	38.18	35-51
2.36	55.32	11.65	73.47	26.53	24-39
1.18	32.69	6.88	80.35	19.65	15-30
0.3	28.15	5.93	86.27	13.73	9-19
0.075	35.64	7.50	93.78	6.22	3-8

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